Module 6: Safety At the HIV Rapid Testing Site

The Lab Quality System

Lab workers Health workers Counselors

Why Is Safety Important?

- Coming in contact with human blood or blood products is potentially hazardous.
- Safety involves taking precautions to protect you and the client against infection.

What Else Needs Protection?

- Other people who may come in contact with testing by-products
- Protect integrity of test products
- Protect environment from hazardous material

Learning Objectives

At the end of this module, you will be able to:

- Adhere to personal health and safety practices
- Maintain a clean and organized workspace
- Disinfect and dispose of infectious materials
- Take appropriate actions following accidental exposure to potentially infectious specimen
- Follow written safety procedures and keep proper safety records

Content Overview

- General safety practices
  - Work habits (personal, work space, material)
  - Proper disposal of sharps and waste
  - Disinfection of work areas
- Safety documentation

Universal or Standard Precautions

Every specimen should be treated as though it is infectious

Apply Safety Practices Throughout the Testing Process

- **Before Testing (Pre-analytical)**
  - Specimen collection
  - Specimen preparation
  - Specimen transport
- **Testing (Analytical)**
  - Testing
- **After Testing (Post-analytical)**
  - Disposal

Develop Personal Safe Work Habits

- Wash hands before and after testing each patient
- Wear a fresh pair of gloves with each patient
- Wear lab coat or apron
- Dispose of contaminated sharps and waste immediately after testing

Develop Personal Safe Work Habits (Cont'd)

- Pipetting by mouth is *strictly forbidden*
- Never eat, drink or smoke at the test site
- Keep food out of the laboratory/testing site refrigerator

Maintain Clean & Orderly Work Space

- Keep work areas uncluttered and clean
- Disinfect work surfaces daily
- Restrict or limit access when working
- Keep supplies locked in a safe and secure area
- Keep emergency eye wash units in working order and within expiry date

Biohazard

Take Precautions to Avoid Needle Stick Injury

What can cause needle stick injury?

- Lack of concentration
- Inexperience
- Lack of concern for others
- Improper disposal of sharps

Drop Used Sharps in Special Containers

Do's and Don'ts: Sharps and Waste Containers

- Do Not break, bend, re-sheath or reuse lancets, syringes or needles
- Do Not shake sharps containers to create space

Do's and Don'ts: Sharps and Waste Containers

What's wrong with this picture?

Never Place Needles or Sharps in Office Waste Containers

- Lab workers
- Health workers
- Counselors

Sharps Containers Must Be:

Placed near workspace

Closed when not in use

Sealed when ¾ full

Policy for Handling Sharps

- User responsible for disposal of sharps
- Must dispose of sharps after each test
- Must place sharps in sharps boxes
- Do not drop sharps on the floor or in the office waste bin
- Place sharps container near your workspace
- Seal and remove when box is ¾ full
- Incinerate all waste

Incineration of Waste

- Incineration is burning of contaminated waste to destroy and kill micro-organisms.
- Incineration:
  - Is effective against potential re-use
  - Protects environment
  - Must be supervised

Disinfect Work Areas with Bleach

Disinfection

- Kills germs and pathogens
- Keeps work surface clean
- Prevents cross-contamination
- Reduces risks of infection

Different Cleaning Jobs Require Different Bleach Solutions*

General lab use - *Hypochlorite Solutions*

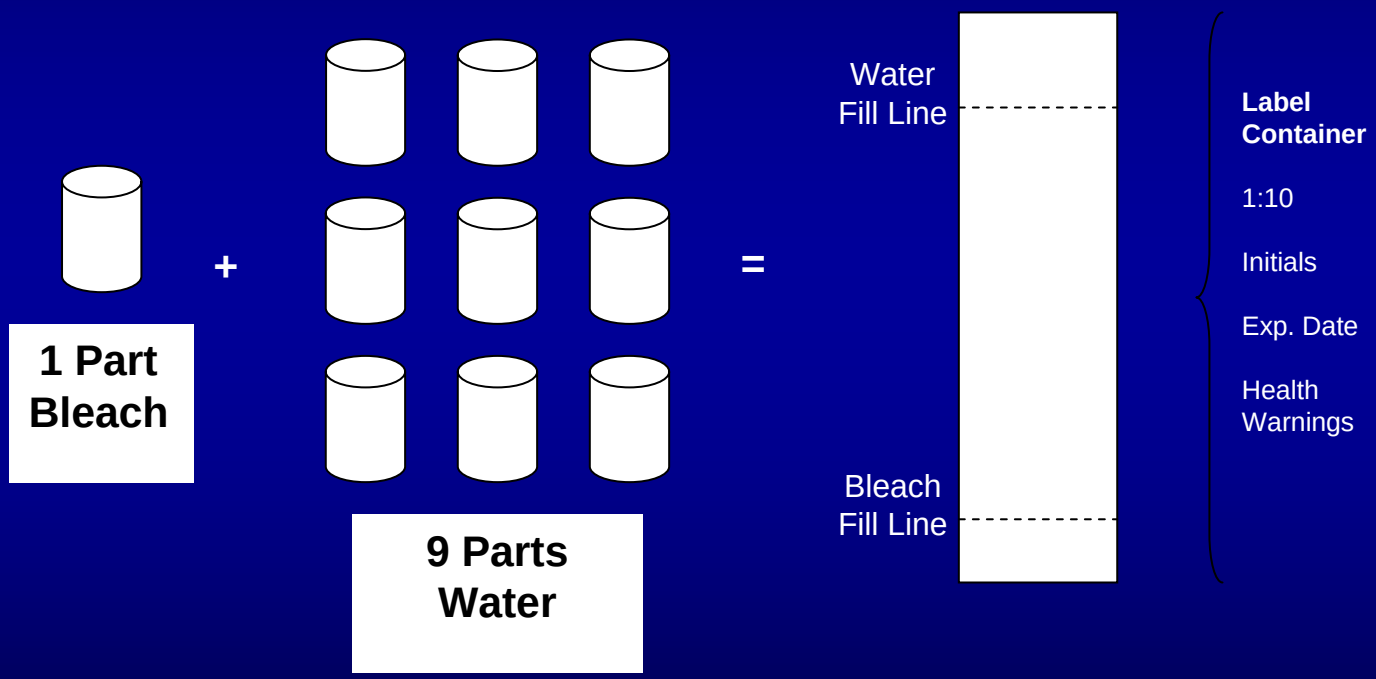
Spills	General Disinfection
10% **(1 part + 9 parts)**	**1%** **(1 part + 99 parts)**

You should have 10% bleach readily available at your test site.

* WHO Laboratory Biosafety Manual

Making a 10% Bleach Solution

Referred to as a 1/10, 1:10, or 5,000 ppm bleach solution



In Case of a Spill or Splash

- Wear clean disposable gloves
- Immediately and thoroughly wash any skin splashed with blood
- Large spills- Cover with paper towels and soak with 10% household bleach and allow to stand for at least 5 minutes
- Small spill - Wipe with paper towel soaked in 10% bleach
- Discard contaminated towels in infectious waste containers

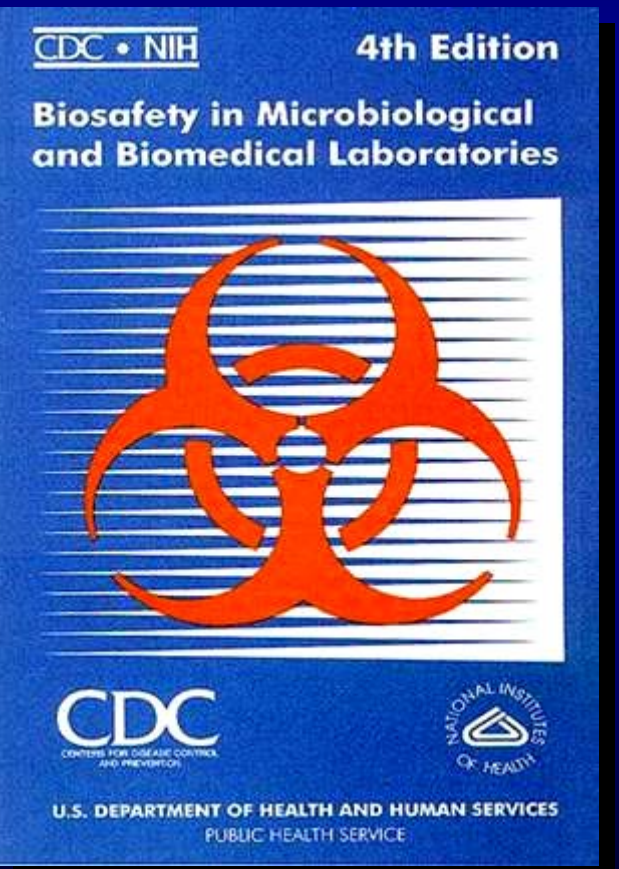
In Case of an Accident

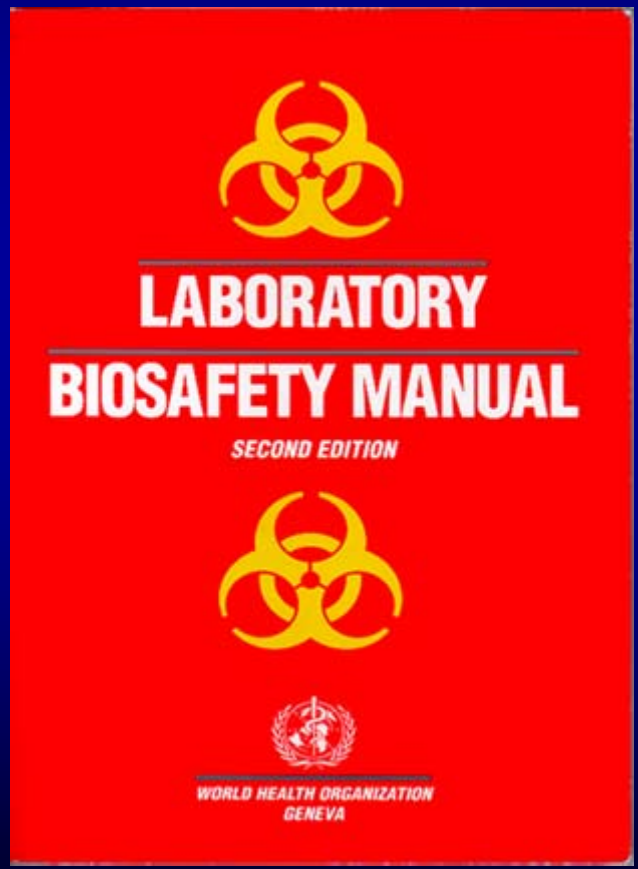
- What types of accidents can happen?
  - Potential Injury, i.e., needlesticks, falls
  - Environmental, i.e., splashes or spills
  - Equipment damage
- What should you do?
  - Report to supervisor immediately
  - Assess & take action
  - Record using form
  - Monitor situation

Action Plan for Implementing Safety Practices

- Identify hazards
- Establish and implement safety polices and procedures
- Conduct safety specific training
  - Must be a priority
  - Communication is key
- Perform regular audits or assessments

Safety References





- Lab workers
- Health workers
- Counselors

Summary

- What is safety? Why is it important?
- What does bio-hazard mean?
- What is the universal precaution you must take when dealing with specimens?
- What are some examples of safety practices related to personal habits? Work space?
- What are the rules related to handling sharps and waste?
- How do you prepare a 10% bleach solution?
- What do you do if there is a spill?
- What do you do when an accident occurs?